

Dr Sonia Boender

Longlist of publications, presentations & communication activities

Research papers

Published

Collaboration papers

Submitted/preprints/in preparation

Other publications

Epidemiological Bulletin

Epidemiological reports (monitoring & surveillance)

PhD thesis

Workshops, invited talks & moderated discussion

Workshops organized

Academic meetings

Technical meetings

Conference proceedings

Oral presentations

Poster presentations (as presenting author)

Science communication

Online records: [Pubmed](#); [Google Scholar](#); [ORCID](#); [Publons](#)

Research papers

Published

1. Establishing infodemic management in Germany: a framework for social listening and integrated analysis to report insights at the national public health institute.
Boender TS, Schneider P, Houareau C, Purnat TD, Ishizumi A, Wilhelm E, Voegeli C, Wieler L, Leuker C. JMIR Infodemiology (forthcoming). [doi: 10.2196/43646](https://doi.org/10.2196/43646)
2. Changes in emergency department utilisation in Germany before and during different phases of the COVID-19 pandemic, using data from a national surveillance system up to June 2021.
Schranz M, Boender TS, Greiner T, Kocher T, Wagner B, Greiner F, Bienzeisler J, Diercke M, Grabenhenrich L, AKTIN-Research Group, Aigner A & Ullrich A. BMC Public Health 23, 799 (2023). <https://doi.org/10.1186/s12889-023-15375-7>
3. Science Communication as a Collective Intelligence Endeavour: A Manifesto and Examples for Implementation.
Holford D, Fasce A, Tapper K, Demko M, Lewandowsky S, Hahn U, Al-Rawi A, Alladin A, Boender TS, Bruns H, Fischer F, Gilde C, Hanel PHP, Herzog SM, Kause A, Lehmann

Last updated: May 2023

- S, Nurse MS, OrrC, Pescetelli N, Petrescu M, Sah S, Schmid P, Sirota M, Wulf M. Science Communication, 2023. <https://doi.org/10.1177/10755470231162634>. Full manifesto here: <https://www.scibeh.org/manifesto/>
4. National medical specialty guidelines of HIV indicator conditions in Europe lack adequate HIV testing recommendations: a systematic guideline review.
Jordans CCE, Vasylyev M, Rae C, Jacobsen ML, Vasilenko A, Dauby N, Malin JJ, Boender TS, Behrens G, Gruell H, Neumann A, Spinner C, Akinosoglou K, Kostaki E-G, Nozza S, Giacomelli A, Lapadula G, Mazzitelli M, Torti C, Matulionyte R, Van Welzen BJ, Hensley K, Thompson M, Ankiersztejn-Bartczak M, Matulyte E, Skrzat - Klapaczyńska A, Sandulescu O, Pokrovskaya A, Hachfeld A, Dorokhine A, Sukach M, Lord E, Sullivan A & Rokx C on behalf of the Guidelines Review Group for the projects: Optimising testing and linkage to care for HIV across Europe (OptTEST by HiE) and the Joint Action on integrating prevention, testing and linkage to care strategies across HIV, viral hepatitis, TB and STIs in Europe (INTEGRATE).
Euro Surveill. 2022;27(48):pii=2200338.
<https://doi.org/10.2807/1560-7917.ES.2022.27.48.2200338>
 5. Using routine emergency department data for syndromic surveillance of acute respiratory illness, Germany, week10 2017 until week10 2021.
Boender TS, Cai W, Schranz M, Kocher T, Wagner B, Ullrich A, Buda S, Zöllner R, Greiner F, Diercke M, Grabenhenrich L.
Euro Surveill. 2022;27(27). doi: 10.2807/1560-7917.ES.2022.27.27.2100865
 6. Long-term HIV treatment outcomes and associated factors in sub-Saharan Africa: multi-country longitudinal cohort analysis.
Inzaule SC, Kroeze S, Kityo CM, Siwale M, Akanmu S, Wellington M, de Jager M, Ive P, Mandaliya K, Stevens W, Steegen K, Nankya I, Boender TS, Ondoa P, Sigaloff KCE, de Wit TFR, Hamers RL AIDS. 2022 May 24. doi: 10.1097/QAD.0000000000003270
 7. Digital Visual Communication for Public Health: Design Proposal for a Vaccinated Emoji.
Boender TS, Louis-Ferdinand N, Duschek G. J Med Internet Res. 2022 Apr 7;24(4):e35786. doi: 10.2196/35786
 8. Risk of Guillain-Barré syndrome after vaccination against human papillomavirus: a systematic review and meta-analysis, 1 January 2000 to 4 April 2020.
Boender TS, Bartmeyer B, Coole L, Wichmann O, Harder T. Euro Surveill. 2022 Jan;27(4):2001619. doi: 10.2807/1560-7917.ES.2022.27.4.2001619
 9. Using emergency department routine data for the surveillance of suicide attempts and psychiatric emergencies [Article in German: *Nutzung von Routinedaten aus Notaufnahmen zur Surveillance von Suizidversuchen und psychiatrischen Notfällen*] Schlump C, Thom J, Boender TS, Wagner B, Diercke M, Kocher T, Ullrich A, Grabenhenrich L, Greiner F, Zöllner R, Mauz E, Schranz M. Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz. 2021 Dec 10;1-10.
<https://doi.org/10.1007/s00103-021-03467-x>
 10. Factors preventing SARS-CoV-2 transmission during unintentional exposure in a GP practice: a cohort study of patient contacts; Germany, 2020.
Boender TS, Bender JK, Krüger A, Michaelis K, Buchholz U. Epidemiol Infect. 2021 Jul 2;149:e161. doi: 10.1017/S0950268821001503
 11. Social media for field epidemiologists (#SoMe4epi): How to use Twitter during the #COVID19 pandemic. Hammer CC, Boender TS, Thomas DR. Int J Infect Dis. 2021 Oct;110 Suppl 1:S11-S16. doi: 10.1016/j.ijid.2021.05.035
 12. Impact of the COVID-19 pandemic and associated non-pharmaceutical interventions on other notifiable infectious diseases in Germany: An analysis of national surveillance data during week 1-2016 - week 32-2020.

- Ullrich A, Schranz M, Rexroth U, Hamouda O, Schaade L, Diercke M, Boender TS; Robert Koch's Infectious Disease Surveillance Group. *Lancet Reg Health Eur.* 2021 Jun 19;6:100103. [doi: 10.1016/j.lanepe.2021.100103](https://doi.org/10.1016/j.lanepe.2021.100103)
13. Real-time data from medical care settings to guide public health action [Article in German: *Gewinnung von Echtzeitdaten aus der medizinischen Versorgung zur Handlungssteuerung in Public Health*] Grabenhenrich L, Schranz M, Boender S, Kocher T, Esins J, Fischer M. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz.* 2021 Mar 24;1-6. [doi: 10.1007/s00103-021-03300-5](https://doi.org/10.1007/s00103-021-03300-5).
14. Access to HIV viral load testing and antiretroviral therapy switch practices: a multi-country prospective cohort study in sub-Saharan Africa. Ondo P, Kim AA, Boender TS, Zhang G, Kroese S, Wiener J, Rinke de Wit T, Nkengasong *AIDS Res Hum Retroviruses.* 2020 Nov;36(11):918-926. [doi: 10.1089/AID.2020.0049](https://doi.org/10.1089/AID.2020.0049)
15. Investigation of a COVID-19 outbreak in Germany resulting from a single travel-associated primary case: a case series. Böhmer MM, Buchholz U, Corman VM, Hoch M, Katz K, Marosevic DV, Böhm S, Woudenberg T, Ackermann N, Konrad R, Eberle U, Treis B, Dangel A, Bengs K, Fingerle V, Berger A, Hörmansdorfer S, Ippisch S, Wicklein B, Grahl A, Pörtner K, Muller N, Zeitlmann N, Boender TS, Cai W, Reich A, An der Heiden M, Rexroth U, Hamouda O, Schneider J, Veith T, Mühlmann B, Wölfel R, Antwerpen M, Walter M, Protzer U, Liebl B, Haas W, Sing A, Drosten C, Zapf A. *Lancet Infect Dis.* 2020 May 15:S1473-3099(20)30314-5. [doi: 10.1016/S1473-3099\(20\)30314-5](https://doi.org/10.1016/S1473-3099(20)30314-5)
16. The relative contributions of HIV drug resistance, nonadherence and low-level viremia to viremic episodes on antiretroviral therapy in sub-Saharan Africa. Inzaule SC, Bertagnolio S, Kityo CM, Siwale M, Akanmu S, Wellington M, de Jager M, Ive P, Mandaliya K, Stevens W, Boender TS, Ondo P, Sigaloff KCE, Rinke de Wit TF, Hamers RL. *AIDS.* 2020 Aug 1;34(10):1559-1566. [doi: 10.1097/QAD.0000000000002588](https://doi.org/10.1097/QAD.0000000000002588)
17. Acute hepatitis C infection among adults with HIV in the Netherlands between 2003 and 2016: a capture-recapture analysis for the 2013 to 2016 period. Boender TS, Op de Coul E, Arends J, Prins M, van der Valk M, van der Meer JTM, van Benthem B, Reiss P, Smit C. *Euro Surveill.* 2020 Feb;25(7). [doi: 10.2807/1560-7917.ES.2020.25.7.1900450](https://doi.org/10.2807/1560-7917.ES.2020.25.7.1900450)
18. Effectiveness of transmitted drug resistance testing before initiation of antiretroviral therapy in HIV-positive individuals. Lodi S, Günthard HF, Gill J, Phillips AN, Dunn D, Vu Q, Siemieniuk R, Garcia F, Logan R, Jose S, Bucher HC, Scherrer AU, Reiss P, van Sighem A, Boender TS, Porter K, Gilson R, Paraskevis D, Simeon M, Vourli G, Moreno S, Jarrin I, Sabin C, Hernán MA. *J Acquir Immune Defic Syndr.* 2019 Nov 1;82(3):314-320. [doi: 10.1097/QAI.0000000000002135](https://doi.org/10.1097/QAI.0000000000002135)
19. Compliance with laboratory monitoring guidelines in outpatient HIV care: a qualitative study in the Netherlands. Toxopeus DCM, Pell CL, Westrhenen NB, Smit C, Wit FWNM, Ondo P, Reiss P, Boender TS. *AIDS Care.* 2019 Jan 2:1-8. [doi: 10.1080/09540121.2018.1563280](https://doi.org/10.1080/09540121.2018.1563280)
20. Previous antiretroviral drug use compromises standard first-line HIV therapy and is mediated through drug-resistance. Inzaule SC, Kityo CM, Siwale M, Akanmu AS, Wellington M, de Jager M, Ive P, Mandaliya K, Stevens W, Boender TS, Ondo P, Sigaloff KCE, Naniche D, Rinke de Wit

- TF, Hamers RL.
Sci Rep. 2018 Oct 25;8(1):15751. [doi: 10.1038/s41598-018-33538-0](https://doi.org/10.1038/s41598-018-33538-0)
21. AIDS Therapy Evaluation in the Netherlands (ATHENA) national observational HIV cohort: cohort profile.
Boender TS, Smit C, Sighem AV, Bezemer D, Ester CJ, Zaheri S, Wit FWNM, Reiss P; ATHENA national observational HIV cohort.
BMJ Open. 2018 Sep 24;8(9):e022516. [doi: 10.1136/bmjopen-2018-022516](https://doi.org/10.1136/bmjopen-2018-022516)
22. Suboptimal immune recovery during antiretroviral therapy with sustained HIV suppression in sub-Saharan Africa.
Kroeze S, Ondoa P, Kityo CM, Siwale M, Akanmu S, Wellington M, de Jager M, Ive P, Mandaliya K, Stevens W, Boender TS, de Pundert ME, Sigaloff KCE, Reiss P, Wit FWNM, Rinke de Wit TF, Hamers RL.
AIDS. 2018 May 15;32(8):1043-1051. [doi: 10.1097/QAD.0000000000001801](https://doi.org/10.1097/QAD.0000000000001801)
23. Effect of immediate initiation of antiretroviral treatment on the risk of acquired HIV drug resistance.
Lodi S, Günthard HF, Dunn D, Garcia F, Logan R, Jose S, Bucher HC, Scherrer AU, Schneider MP, Egger M, Glass TR, Reiss P, van Sighem A, Boender TS, Phillips AN, Porter K, Hawkins D, Moreno S, Monge S, Paraskevis D, Simeon M, Vourli G, Sabin C, Hernán MA; HIV-CAUSAL Collaboration.
AIDS. 2018 Jan 28;32(3):327-335. [doi: 10.1097/QAD.0000000000001692](https://doi.org/10.1097/QAD.0000000000001692)
24. Pretreatment HIV drug resistance results in virological failure and accumulation of additional resistance mutations in Ugandan children.
Kityo C* & Boerma RS*, Sigaloff KCE, Kaudha E, Calis JCJ, Musiime V, Balinda S, Nakanjako R, Boender TS, Mugyenyi PN, Rinke de Wit TF. [*Authors contributed equally to the work].
J Antimicrob Chemother. 2017 Sep 1;72(9):2587-2595. [doi: 10.1093/jac/dkx188](https://doi.org/10.1093/jac/dkx188)
25. Twenty years of combination antiretroviral therapy for HIV infection in the Netherlands: progression and new challenges [Articlr in Dutch: 20 jaar hiv-combinatietherapie in Nederland].
Brinkman K* & Boender TS*, van der Valk M, van Sighem A, Reiss P, Kroon FP, namens het ATHENA observationele HIV cohort. [*Authors contributed equally to the work]
Ned Tijdschr Geneeskrd. 2017;161:[D1123](#).
26. Adherence to antiretroviral therapy for HIV in sub-Saharan Africa and Asia: a comparative analysis of two regional cohorts.
Bijker R, Jiamsakul A, Kityo C, Kiertiburanakul S, Siwale M, Phanuphak P, Akanmu S, Chaiwarith R, Wit FW, Sim BL, Boender TS, Ditangco R, Rinke De Wit TF, Sohn AH, Hamers RL.
J Int AIDS Soc. 2017 Mar 3;20(1):1-10. [doi: 10.7448/IAS.20.1.21218](https://doi.org/10.7448/IAS.20.1.21218)
27. High levels of pre-treatment HIV drug resistance and treatment failure in Nigerian children
Boerma RS* & Boender TS*, Sigaloff KCE; Rinke de Wit TF; Boele van Hensbroek M; Ndembu N; Adeyemo T; Temiye EO; Osibogun A; Ondoa, P, Calis JC* & Akanmu AS* [*Both first and both senior authors contributed equally to the work].
J Int AIDS Soc. 2016 Nov 10;19(1):21140. [doi: 10.7448/IAS.19.1.21140](https://doi.org/10.7448/IAS.19.1.21140)
28. Suboptimal viral suppression rates among HIV-infected children in low- and middle-income countries: a meta-analysis.
Boerma RS, Boender TS, Bussink AP, Calis JC, Bertagnolio S, Rinke de Wit TF, Boele van Hensbroek M, Sigaloff KC.
Clin Infect Dis. 2016 Dec 15;63(12):1645-1654. [doi: 10.1093/cid/ciw645](https://doi.org/10.1093/cid/ciw645)
29. Second-line HIV Treatment in Ugandan Children: Favorable Outcomes and No Protease Inhibitor Resistance.

- Boerma RS* & Kityo C*, Boender TS, Kaudha E, Kayiwa J, Musiime V, Mukuye A, Kiconco M, Nankya I, Nakatudde L, Mugyenyi PN, Boele van Hensbroek M, Rinke de Wit TF, Sigaloff KC & Calis JC. [*Both first and both senior authors contributed equally to the work].
J Trop Pediatr. 2017 Apr 1;63(2):135-143. [doi: 10.1093/tropej/fmw062](https://doi.org/10.1093/tropej/fmw062)
30. Protease Inhibitor Resistance in the First 3 Years of Second-Line Antiretroviral Therapy for HIV-1 in Sub-Saharan Africa.
Boender TS, Hamers RL, Ondoa P, Wellington M, Chimbetete C, Siwale M, Labib Maksimos EE, Balinda SN, Kityo CM, Adeyemo TA, Akanmu AS, Mandaliya K, Botes ME, Stevens W, Rinke de Wit TF, Sigaloff KC.
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31. Accumulation of HIV-1 drug resistance after continued virological failure on first-line ART in adults and children in sub-Saharan Africa.
Boender TS, Kityo CM, Boerma RS, Hamers RL, Ondoa P, Wellington M, Siwale M, Nankya I, Kaudha E, Akanmu AS, Botes ME, Steegen K, Calis JC, Rinke de Wit TF, Sigaloff KC.
J Antimicrob Chemother. 2016 Oct;71(10):2918-27. [doi: 10.1093/jac/dkw218](https://doi.org/10.1093/jac/dkw218)
32. HIV Drug Resistance Among Children Initiating First-Line Antiretroviral Treatment in Uganda.
Kityo C, Sigaloff KC, Boender TS, Kaudha E, Kayiwa J, Musiime V, Mukuye A, Kiconco M, Nankya I, Nakatudde-Katumba L, Calis JC, Rinke de Wit TF, Mugyenyi PN.
AIDS Res Hum Retroviruses. 2016 Jul;32(7):628-35. [doi: 10.1089/AID.2015.0215](https://doi.org/10.1089/AID.2015.0215)
33. Sequencing paediatric antiretroviral therapy in the context of a public health approach.
Boerma RS, Boender TS, van Hensbroek MB, Rinke de Wit TF, Sigaloff KC.
J Int AIDS Soc. 2015 Dec 2;18(Suppl 6):20265. [doi: 10.7448/IAS.18.7.20265](https://doi.org/10.7448/IAS.18.7.20265)
34. Pretreatment HIV drug resistance increases regimen switches in sub-Saharan Africa.
Boender TS, Hoenderboom BM, Sigaloff KC, Hamers RL, Wellington M, Shamu T, Siwale M, Labib Maksimos EE, Nankya I, Kityo CM, Adeyemo TA, Akanmu AS, Mandaliya K, Botes ME, Ondoa P, Rinke de Wit TF.
Clin Infect Dis. 2015 Dec 1;61(11):1749-58. [doi: 10.1093/cid/civ656](https://doi.org/10.1093/cid/civ656)
35. Long-term Virological Outcomes of First-Line Antiretroviral Therapy for HIV-1 in Low- and Middle-Income Countries: A Systematic Review and Meta-analysis.
Boender TS, Sigaloff KC, McMahon JH, Kiertiburanakul S, Jordan MR, Barcarolo J, Ford N, Rinke de Wit TF, Bertagnolio S.
Clin Infect Dis. 2015 Nov 1;61(9):1453-61. [doi: 10.1093/cid/civ556](https://doi.org/10.1093/cid/civ556)
36. Research in action: from AIDS to global health to impact. A symposium in recognition of the scientific contributions of Professor Joep Lange.
Boender TS[†], Barré-Sinoussi F, Cooper D, Goosby E, Hankins C, Heidenrijk M, de Jong M, Kazatchkine M, Laoye F, Merson M, Reiss P, Rinke de Wit TF, Rogo K, Schellekens O, Schultsz C, Sigaloff KC, Simon J, Zewdie D. [[†]Primary author. Subsequent authors listed alphabetically]
Antivir Ther. 2015;20(1):101-8. [doi: 10.3851/IMP2946](https://doi.org/10.3851/IMP2946)
37. Performance and logistical challenges of alternative HIV-1 virological monitoring options in a clinical setting of Harare, Zimbabwe.
Ondoa P, Shamu T, Bronze M, Wellington M, Boender TS, Manting C, Steegen K, Luethy R, Rinke de Wit T.
Biomed Res Int. 2014;2014:102598. [doi: 10.1155/2014/102598](https://doi.org/10.1155/2014/102598)
38. Barriers to Initiation of Pediatric HIV Treatment in Uganda: A Mixed-Method Study.
Boender TS, Sigaloff KC, Kayiwa J, Musiime V, Calis JC, Hamers RL, Nakatudde LK, Khauda E, Mukuye A, Ditai J, Geelen SP, Mugyenyi P, Rinke de Wit TF, Kityo C.
AIDS Res Treat. 2012;2012:817506. [doi: 10.1155/2012/817506](https://doi.org/10.1155/2012/817506)

Collaboration papers

39. Field investigations of SARS-CoV-2-outbreaks in Germany by the Robert Koch Institute, February–October 2020 [Article in German: *Untersuchung von SARS-CoV-2-Ausbrüchen in Deutschland durch Feldteams des Robert Koch-Instituts, Februar–Oktober 2020*]
Alpers K, Haller S, Buchholz U, RKI Feldteams
Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz. 2021 Apr;64(4):446-453. [doi: 10.1007/s00103-021-03296-y](https://doi.org/10.1007/s00103-021-03296-y)
40. Prevalence and Clinical Outcomes of Poor Immune Response Despite Virologically Suppressive Antiretroviral Therapy Among Children and Adolescents With Human Immunodeficiency Virus in Europe and Thailand: Cohort Study.
European Pregnancy and Paediatric HIV Cohort Collaboration (EPPICC) Study Group in EuroCoord.
Clin Infect Dis. 2020 Jan 16;70(3):404-415. [doi: 10.1093/cid/ciz253](https://doi.org/10.1093/cid/ciz253)
41. First-line HIV treatment failures in non-B subtypes and recombinants: a cross-sectional analysis of multiple populations in Uganda.
Poon AFY, Ndashimye E, Avino M, Gibson R, Kityo C, Kyeyune F, Nankya I, Quiñones-Mateu ME, Arts EJ; The Ugandan Drug Resistance Study Team.
AIDS Res Ther. 2019 Jan 22;16(1):3. [doi: 10.1186/s12981-019-0218-2](https://doi.org/10.1186/s12981-019-0218-2)
42. Clinically relevant thresholds for ultrasensitive HIV drug resistance testing: a multi-country nested case-control study.
Inzaule SC, Hamers RL, Noguera-Julian M, Casadellà M, Parera M, Kityo C, Steegen K, Naniche D, Clotet B, Rinke de Wit TF, Paredes R; PanAfrican Studies to Evaluate Resistance.
Lancet HIV. 2018 Nov;5(11):e638-e646. [doi: 10.1016/S2352-3018\(18\)30177-2](https://doi.org/10.1016/S2352-3018(18)30177-2)
43. Gender differences in the use of cardiovascular interventions in HIV-positive persons; the D:A:D Study.
Hattleberg CI, Ryom L, El-Sadr W, Mocroft A, Reiss P, De Wit S, Dabis F, Pradier C, d'Arminio Monforte A, Kovari H, Law M, Lundgren JD, Sabin CA; Data Collection of Adverse Events of Anti-HIV drugs (D:A:D) Study group.
J Int AIDS Soc. 2018 Mar;21(3). [doi: 10.1002/jia2.25083](https://doi.org/10.1002/jia2.25083)
44. Management of drug interactions with direct-acting antivirals in Dutch HIV/hepatitis C virus-coinfected patients: adequate but not perfect.
Smolders EJ, Smit C, de Kanter C, Dofferhoff A, Arends JE, Brinkman K, Rijnders B, van der Valk M, Reiss P, Burger DM; ATHENA National HIV Observational Cohort.
HIV Med. 2018 Mar;19(3):216-226. [doi: 10.1111/hiv.12570](https://doi.org/10.1111/hiv.12570)
45. High Treatment Uptake in Human Immunodeficiency Virus/Hepatitis C Virus-Coinfected Patients After Unrestricted Access to Direct-Acting Antivirals in the Netherlands.
Boerekamps A, Newsum AM, Smit C, Arends JE, Richter C, Reiss P, Rijnders BJA, Brinkman K, van der Valk M; NVHB-SHM Hepatitis Working Group and the Netherlands ATHENA HIV Observational Cohort.
Clin Infect Dis. 2018 Apr 17;66(9):1352-1359. [doi: 10.1093/cid/cix1004](https://doi.org/10.1093/cid/cix1004)

Submitted/preprints/in preparation

46. Patient characteristics rather than choice for dolutegravir or elvitegravir determine the likelihood of cART discontinuation; evidence from the ATHENA national observational HIV cohort study in the Netherlands.
Bollen PDJ, Hakkers CS, Boender TS, van Crevel R, Brouwer A, Hoepelman IM, Reiss P, Wit FWNM, Arends JE, Burger DM, on behalf of the ATHENA national observational HIV cohort. *Submitted. Preprint.*
47. Ethical science communication during an international health emergency: a proposal on code of conduct from members of the international research community.
Cevik M, Baidjoe AY, Boender TS, Bogoch II, Gobat N, Hansen L, et al. *Submitted.*
48. The impact of the COVID-19 pandemic and associated public health and social measures on other notifiable infectious diseases under national surveillance in Germany, week 1-2016 – week 52-2021.
Schranz M, Ullrich A, Rexroth U, Hamouda O, Schaade L, Diercke M, Boender TS; Robert Koch's Infectious Disease Surveillance Group.
In preparation.
49. Vaccine effectiveness against COVID-19 and associated death in Alpha and Delta variant outbreaks in long-term care facilities in Germany.
Sandfort M, Meyer E, Boender S, Bojara G, Enkelmann J, Fickenscher H, Frank C, Hecht J, Hofmann A, Schlosser H, Schumacher S, Sperle-Heupel I, Hellenbrand W, Harder T, Matysiak-Klose D, Schönfeld V.
In preparation. Oral presentation at ESCAID 2022.
50. Evidence and gap map of interventions for infodemic management during health emergencies: a case of COVID-19 pandemic.
Purnat T, Oommen, Prachi Pundir J, Ishizumi A, Murthy S, Rajwar E, Johnson R, Rahman R, Mathew S, Shrivastava K, Scales D, Holford D, Petelos E, Wilhelm E, Grant I, Kolis J, Saif-Ur-Rahman KM, Marisa Bucci L, Umutoni Sekamana M, van der Linden S, Indra Astuti S, AlDossary S, Boender TS, Kabakian T, Sethi T, Briand S, Nguyen T.
In preparation. Study protocol: <https://osf.io/7r3a8/>
51. Development and validation of a syndromic surveillance for gastrointestinal infections in emergency departments in Germany, January 2019 – August 2022.
Baum J, Doerre A, Heldt K, AKTIN-Research Group, Walter J, Raiser-Gillesberg S, Boender S, Wilking H, Schranz M.
In preparation.

Other publications

Epidemiological Bulletin

- Toegepaste infectieziekte-epidemiologie op de kaart.
J. van den Boogaard, S. Boender, R. Tjon-Kon-Fat, A. Bosman, M. Knol, S. Hahné, A. Tostmann. *Infectieziekten Bulletin* december 2022. [IB 10-2022](#).
- Emergency department surveillance at the RKI using routine data from the AKTIN emergency admission registry. [Article in German: *Notaufnahmesurveillance am RKI mittels Routinedaten aus dem AKTIN-Notaufnahmeregister.*] Greiner T, Boender TS, Greiner F, Ehrentreich S, Kocher T, Wagner B, Ullrich A, Schranz M, Graben- henrich L, Bienzeisler J, Kombeiz A, Blaschke S, Dormann H, SUMO-Team, AKTIN Research Group. [Epid Bull 2022;8:3-9. DOI 10.25646/9747](#)
- Routine data for emergency department surveillance: 1.5 years of emergency department situation reports. [Article in German: *Routinedaten aus der medizinischen*

*Versorgung für die Notaufnahme-Surveillance: 1,5 Jahre
Notaufnahme-Situationsreport.]*

Greiner T, Boender TS, Greiner F, Schirrmeister W, Bienzeisler J, Kocher T, Matsuoka J, Wagner B, Ullrich A, Schlump C, Grabenhenrich L, Diercke M, Schranz M. Robert Koch-Institut, 2021. [DOI 10.25646/9413](https://doi.org/10.25646/9413)

- Travel-associated COVID-19 cases in Offenbach and Germany, June–November 2020: disease onset and SARS-CoV-2 testing after entry. [Article in German: *Reiseassoziierte COVID-19-Fälle im Stadtkreis Offenbach und Deutschland, Juni – November 2020: Erkrankungsbeginn und SARS-CoV-2-Testungen nach Einreise.*] Boender TS, von Kleist M, Faust C, Heese H, Bornhofen B, Lewandowsky MM, Rieß M. [Epid Bull 2021;32:3 -13 | DOI 10.25646/8828](https://doi.org/10.25646/8828)
- The impact of the COVID-19 pandemic and associated public health measures on other notifiable infectious diseases in Germany (week 1/2016 – 32/2020). [Article in German: *Die Auswirkungen der COVID-19-Pandemie und assoziierter Public-Health-Maßnahmen auf andere meldepflichtige Infektionskrankheiten in Deutschland (MW 1/2016 – 32/2020).*] Schranz M, Ullrich A, Rexroth U, Hamouda O, Schaade L, Diercke M, Boender S. [Epid Bull 2021;7:3 -7 | DOI 10.25646/8011](https://doi.org/10.25646/8011)
- Utilization of German emergency departments during the COVID-19 pandemic - the Emergency Department Situation Report (SitRep). [Article in German: *Inanspruchnahme deutscher Notaufnahmen während der COVID-19-Pandemie – der Notaufnahme-Situationsreport (SitRep).*] Boender TS, Greiner F, Kocher T, Schirrmeister W, Majeed RW, Bienzeisler J, Grabenhenrich L, Schranz M. [Epid Bull 2020;27:3-5. DOI 10.25646/6959](https://doi.org/10.25646/6959)
- Use of routine data from emergency departments: Description of two clusters of emergency department presentations in Wolfsburg and Stuttgart during the COVID-19 pandemic. [Article in German: *Nutzung von Routinedaten aus Notaufnahmen: Beschreibung zweier Häufungen von Notaufnahmeverststellungen in Wolfsburg und Stuttgart während der COVID-19-Pandemie.*] Schranz M, Greiner F, Kocher T, Grabenhenrich L, Majeed RW, Erdmann B, Menzel CU, Schilling T, Boender TS. [Epid Bull 2020;27:6–11. DOI 10.25646/6960](https://doi.org/10.25646/6960)

Epidemiological Reports (monitoring & surveillance)

- Infectious disease annual report in 2019, 2020, and 2021: Infektionsepidemiologisches Jahrbuch. Berlin: [Robert Koch-Institut](#).
- HIV Monitoring Reports for the Netherlands in 2016, 2017, and 2018: Human Immunodeficiency Virus (HIV) Infection in the Netherlands. Amsterdam: [Stichting HIV Monitoring](#).

PhD thesis

- Long-term effects of HIV treatment in sub-Saharan Africa: from access to quality. T.S. Boender.
Supervisors: Prof. dr. T.F. Rinke de Wit & Prof. dr. M. Boele van Hensbroek.
Co-supervisors: Dr. K.C.E. Sigaloff & Dr. J.C.J. Calis.
Date of PhD defense: May 20th, 2016.
Thesis available online at <http://hdl.handle.net/11245/1.530341>

Workshops, invited talks & moderated discussion

Workshops organised

- Organiser of the [WEON pre-conference](#) ‘Making sense out of incomplete data’, 21 June 2023, Erasmus MC, Rotterdam, the Netherlands.
- Co-organiser of the two-day EPIET Alumni Network Workshop on Media and Infodemic Management, 21-22 Nov 2022, Stockholm.
- Organiser of the [WEON pre-conference](#) ‘The Art of Applied Infectious Disease Epidemiology’, 8 June 2022, RadboudUMC, Nijmegen, the Netherlands.
- Organiser of 3-hour workshop ‘Using Social Media as a Global Health Researcher’ for the [Uniting Streams](#) network, 18 November 2021, Online.
- Co-organiser of the ESCAIDE2019 Career Compass, November 2019, Stockholm, Sweden.
- Co-organiser and trainer of the two-day EPIET Alumni Network on Workshop Social Media for Public Health Professionals, August 2019, Prague, Czech Republic.

Academic meetings

- Round table 9.J.: Experiences on infodemic management in public health authorities in Europe and internationally: Experiences on infodemic management in public health authorities in Europe and internationally, European Public Health Conference, 12 November 2022, Berlin, Germany. European Journal of Public Health, Volume 32, Issue Supplement_3, October 2022, ckac129.585, <https://doi.org/10.1093/eurpub/ckac129.585>
- Poster Tour moderator of the sessions ‘Surveillance: respiratory viruses’ (16 Nov) and ‘HIV, sexually transmitted infections and viral hepatitis’ (19 Nov), European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE2021), 16-19 November 2021, Stockholm, Sweden/Online.
- Panel Discussion: How can science be more credible? Biased research and fake news. (In)Credible Research – [ECR Conference](#), Berlin University Alliance, 7-8 October 2021, Berlin/Online.
- Invited talk: “Social Media for Public Health. Berlin Epidemiological Methods Colloquium (BEMC). 7 April 2021, Berlin/Online. [Recording on YouTube](#)

Technical meetings

- Social Media Training Session, PH Wales & WHO Collaborating Centre, 12 October 2022, Online.
- Infodemic management, Stakeholders and Communication division staff meeting, European Medicines Agency (EMA), 27 September 2022, Online.
- World Health Organization, Epidemic Intelligence from Open Sources (EIOS) Global Technical Meeting (GTM), co-organiser of the 2-hour webinar: Social Media for Public Health Intelligence - The Good, The Bad and The Ugly”. 7 December 2021. [Recording on YouTube](#)
- Dutch public health service GGD GHOR, The German COVID-19 response; scaling up contact tracing, 17 September 2020. Online.
- National Uganda Virus Research Institute Stakeholders’ Workshop. Kampala, Uganda. 11-12 March 2015. Workshop theme: Working together for better HIV laboratory services and improved delivery of prevention and care. Presentation: HIV Drug Resistance in Sub-Saharan Africa response to 1st-line ART.

Featured in newspaper article: New Vision, HIV drug resistance worries experts, March 13, 2015.

- HIV Drug Resistance Technical Working Group, Harare, Zimbabwe. 29 October 2015. Presentation title: Long-term HIV treatment outcomes: findings from the PASER study, highlights from Zimbabwe.

Conference proceedings (as presenting author)

Oral presentations

- Using the epidemiological toolkit to manage the infodemic. Abstract #1415. Symposium: Effective science communication based on psychological insights – quo vadis? 52nd Congress of the German Psychological Society, 15 September 2022, Hildesheim, Germany.
- The #VaccineEmoji: a design proposal for a vaccinated emoji. INFODEMIC: a Stanford Conference on Social Media & COVID-19 Misinformation, Research Symposium, 26 August 2021, Online.
- Risk of Guillain-Barré Syndrome after vaccination against human papillomavirus (HPV): a systematic review. Abstract #2.2. European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE 2019), 27 November 2020, Stockholm, Sweden.
- Notification and registration of acute hepatitis C infection among HIV-positive adults. [Presentation in Dutch: Acute hepatitis C bij mensen met hiv: melding & registratie], Annual SOA/HIV Expertmeeting, 22 June 2018, Netherlands National Institute for Public Health and Environment [*Rijksinstituut voor Volksgezondheid en Milieu, RIVM*], Bilthoven, the Netherlands.
- Accumulation of HIV-1 drug resistance after continued virological failure on first-line antiretroviral therapy in adults and children. Abstract #7. 10th International Workshop on HIV Treatment, Pathogenesis, and Prevention Research in Resource Limited Settings (INTEREST), May 3-6 2016, Yaoundé, Cameroon.
- Protease Inhibitor Resistance at 2nd-Line HIV Treatment Failure in Sub-Saharan Africa. XXV International HIV Drug Resistance Workshop, 21-22 February 2016, Boston: Abstract #38.
Featured in: Global Antiviral Journal Volume 12 Supplement 1.
- Pretreatment HIV Drug Resistance Increases Regimen Switch in Sub-Saharan Africa. Conference on Retroviruses and Opportunistic Infections (CROI) 23-26 February 2015, Seattle: Abstract #118.
Featured in: Olander, S.A. et al., 2015. CROI 2015: Advances in antiretroviral therapy. Top Antivir Med, 23(1), pp.28–45.
- Pretreatment HIV Drug Resistance Increases Regimen Switch in Sub-Saharan Africa. XXIV International HIV Drug Resistance Workshop, 21-22 February 2015, Seattle: Abstract #3.
Featured in: Prevalence of transmitted drug resistance globally: highest in Australia, US and some European countries but between-country differences in all regions. iBase HIV Treatment Bulletin. 24 March 2015.
- Continued virological failure and unnecessary switching of antiretroviral treatment for HIV-1 may occur despite access to viral load monitoring. African Society for Laboratory Medicine (ASLM) Conference 1 December 2014, Cape Town, South Africa.

Poster presentations

- The impact of the COVID-19 pandemic & associated public health measures on other notifiable infectious diseases under surveillance in Germany. ESCAIDE. 24-27 November 2020. Online. Abstract 6.16.
- The risk of SARS-CoV-2 transmission by infected general practitioners (GPs): a cohort of contacts from a GP practice in Nuremberg, Germany, February – March 2020. ESCAIDE. 24-27 November 2020. Online. Abstract 6.9.
- Substantial decline in virological failure after combination antiretroviral treatment (cART) initiation in treatment-naïve HIV-positive adults in the Netherlands from 1996 to 2016. 22nd International AIDS Conference (AIDS 2018), Amsterdam, Netherlands, 23-27 July 2018. Abstract 1405.
- Acute hepatitis C infection among HIV-positive adults in the Netherlands: a capture-recapture analysis of two national databases. 22nd International Workshop on HIV and Hepatitis Observational Databases (IWHOD), Fuengirola, Spain, 22-24 March 2018. Abstract 036.
- Substantial decline in virological failure after combination antiretroviral treatment (cART) initiation in treatment-naïve HIV-positive adults in the Netherlands from 1996 to 2016. 22nd International Workshop on HIV and Hepatitis Observational Databases (IWHOD), Fuengirola, Spain, 22-24 March 2018. Abstract 115.
- Initiation of cART: a nationwide overview of variation between HIV treatment centres in the Netherlands. 9th IAS Conference on HIV Science (IAS), Paris, France, 23-26 July 2017. Abstract #WEPED1415.
- Durability of first-line combination antiretroviral therapy (cART) for HIV in the Netherlands. 21st International Workshop on HIV and Hepatitis Observational Databases (IWHOD), Lisbon, Portugal, 30th March - 1st April 2017. Abstract #110.
- HIV drug resistance after continued virological failure on first line antiretroviral therapy predicts limited role for second-generation non-nucleoside reverse transcriptase inhibitors in sub-Saharan Africa. 20th International Workshop on HIV Observational Databases (IWHOD) 7-9th April 2016, Budapest, Hungary. Abstract #123.
- Protease Inhibitor Resistance at 2nd-line HIV Treatment Failure in Sub-Saharan Africa. Conference on Retroviruses and Opportunistic Infections (CROI) February 22–25 2016, Boston, MA, USA. Abstract #498.
Featured in: Taylor BS, Olander SA, Tieu HV, Wilkin TJ. CROI 2016: Advances in antiretroviral therapy. Top Antivir Med 2016 May-Jun;24(1):59-81.
- Long-term virological outcomes of first-line antiretroviral therapy for HIV-1 in low- and middle-income countries: a systematic review and meta-analysis. Netherlands Conference on HIV Pathogenesis, Epidemiology, Prevention and Treatment (NCHIV) 18 November 2014: Abstract #38.
- Favorable Long-term Outcomes of 2nd-line ART Despite Drug-Resistant HIV-1 in Sub-Saharan Africa. Conference on Retroviruses and Opportunistic Infections (CROI) 3-6 March 2014: Abstract #570.
Featured in: Taylor BS, Shalev N, Wilkin TJ. CROI 2014: Advances in antiretroviral therapy. Top Antivir Med 2014 May; 22: 616–31.

Science communication activities

- Trainer and organizer of various workshops and trainings in science communication for academics, epidemiologists and public health professionals, social media for public

health, and infodemic management; full list under ‘Workshops, invited talks & moderated discussion’

- Social media related activities
 - Member of Robert Koch Institute’s Social Media Task Force. Weekly input on content for Twitter ([@rki_de](#); 611.2K followers), Instagram ([@rki_fuer_euch](#); 13.1K followers), and [LinkedIn](#)
 - Active on Twitter: [@SoniaBoender](#)
 - In the week of 22-28 April 2019, I tweeted for the Dutch rotating curator account for scientists: [@NL_Wetenschap](#); [blog post](#).
 - Founder of the hashtag: #SoMe4epi
 - Published a [perspective piece](#) on using Twitter as a field epidemiologist during the COVID-19 pandemic.
 - With Gideon Duschek, I advocate for a vaccinated emoji: #VaccineEmoji
 - On Twitter: <https://twitter.com/VaccineEmoji>
 - Full story in the [Journal of Medical Internet Research](#)



- Contributor to a manifesto for science communication as collective intelligence: <https://www.scibeh.org/manifesto/>
- Media: interviews with journalists reporting on the COVID-19 response activities in Germany. Including the main news outlets in the Netherlands (NOS, NRC, De Groene Amsterdamer) and Germany (Tagesschau, Deutschlandfunk).
- Empowering Women and girls through mentoring - the [#ITOO](#) initiative by Mpho & Marceline van Furth-Tutu.
- HIV Next Gen Workshop, to mobilize 120 passionate students to become the next generation of HIV leaders and change makers (parallel to the AIDS 2018 conference), 23 July 2018. Session 4: How to limit the spread of the virus. Presentation and interview, together with Dr Stefano Vella.